

RAO/305 Overview

300 Orientation

October 22, 2008
Cindy Fryer, Chief





RAO Mission



RAO is an operations research shop and serves as a resource to Center Management for independent assessments of cost and schedule risk, so that informed decisions can be made to promote mission success, thereby enhancing the Center's ability to deliver on its commitments.



RAO Organizational Chart



CODE 305

Chief: Cindy Fryer
Deputy: Harry Born
Program Operations
Assistant:
Michele Towle

DCAN Team

- Dedra Billings
- Jerry Miller
- Marilyn Mitchell
- Param Nair
- Carla Ridgeway
- Bryon Wong

Math Modeling Team

- Hossin Abdeldayem
- Paul Guill, Lead
- Francis Martinez
- Marshall Sutton

Independent Assessment Team

- Kevin Jones
- Caleb Noblitt
- John Owusu
- Chris Ridenour
- Clay Templeton



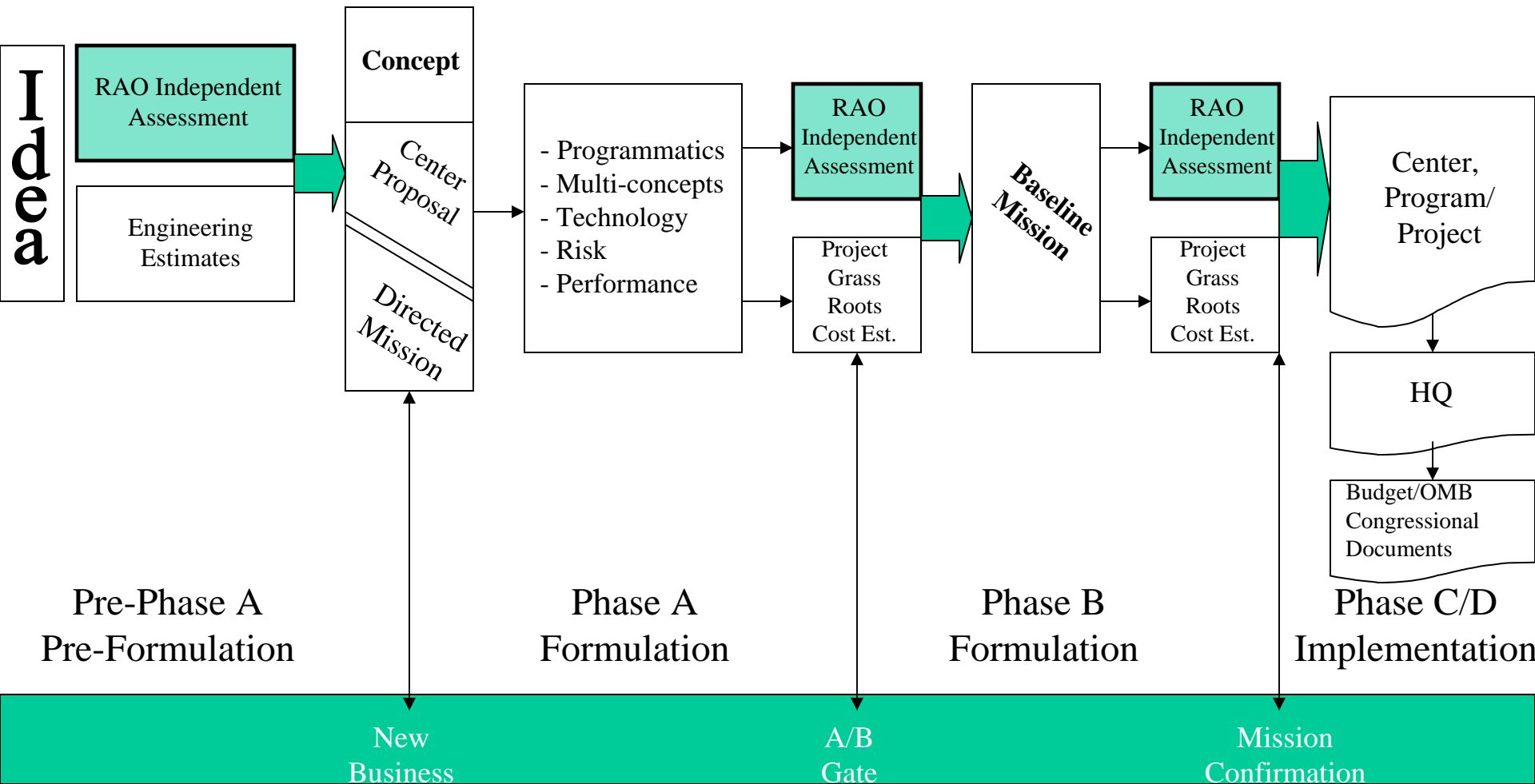
RAO Functional Teams



- DCAN (Data Collection, Analysis and Normalization)
 - Foundation for statistical models used in the conduct of independent assessments
 - Collect NASA mission cost, technical and programmatic data
 - Analyze and normalize data
 - Develop, maintain, and update databases
 - Library & data access, maintenance, and upgrades
- Mathematical Modeling
 - Develop statistical models for use in the conduct of independent assessments
- Independent Assessment
 - Provide independent assessments of cost and schedule risk
 - Analysis is presented to Code 100



RAO Timeline





RAO Products



- In Support of Missions, Proposals, Instruments, Spacecraft
 - Independent Assessments of Cost & Schedule Risk
 - S-Curve: Cost Risk
 - Historical Schedule Analysis: Schedule Risk
 - MCRAM (Mission Cost Risk Assessment Model): Cost, Schedule, & Technical Risk
 - Recommendations
 - Customized Statistical Models
 - Trade Studies: relative cost not absolute
 - Goddard Assessment for Proposal Success (GAPS)
 - Operations Research Studies



Career Paths



- **RAO Competencies:**

- Auditing
- Business
- Chemistry
- Computer Science
- Economics
- Education
- Engineering
- Finance
- Information Technology
- International Relations
- Laser Technology
- Library Science
- Marketing
- Mathematics
- Physics
- Psychology



Story of Success



GSFC GPM 2005 In-House Spacecraft Win

"RAO's analysis was crucial to this in-house win."

**--Ed Weiler, Associate Administrator, SMD - comment
made when he was the GSFC Center Director**

